



State Revolving Fund Loan Programs Drinking Water, Wastewater, Nonpoint Source

PRELIMINARY DECISION OF CATEGORICAL EXCLUSION

TO ALL INTERESTED CITIZENS, ORGANIZATIONS AND GOVERNMENT AGENCIES:

**CITY OF EVANSVILLE
Weinbach Lift Station Renovation Project
SRF # WW 08 13 82 05**

Date: March 21, 2012

Pursuant to IC 4-4-11, the State Revolving Fund (SRF) Loan Program has determined that the project described here and in Evansville's Preliminary Engineering Report received by the SRF on January 30, 2012, will have no substantial negative environmental impact. Therefore, the SRF is issuing a preliminary decision of Categorical Exclusion from the requirements of substantive environmental review.

How were environmental issues considered?

The National Environmental Policy Act (NEPA) requires agencies disbursing Federal funds to include environmental factors in the decision making process. A summary of the project is attached for your review. The SRF's preliminary review has found that the proposed project does not require the preparation of either an Environmental Assessment or an Environmental Impact Statement.

Why is additional environmental review not required?

Our environmental review has concluded that significant environmental impacts will not result from the proposed action.

How do I submit comments?

Comments can be submitted to:

Mr. Max Henschen, Senior Environmental Manager
SRF Programs
317-232-8623; mhensche at ifa.in.gov

CATEGORICAL EXCLUSION

I. PROJECT IDENTIFICATION

Project Name and Address: **Weinbach Lift Station Renovation
Preliminary Engineering Report (PER)**
City of Evansville
1 NW Martin Luther King Jr. Blvd., Room 104
Evansville, IN 47740-0001

SRF Project Number: WW 08 13 82 05

Authorized Representative: Mr. Allen Mounts, Director
Evansville Water and Sewer Utility

II. PROJECT LOCATION

Evansville is located in southeastern Vanderburgh County in southwest Indiana. The Weinbach lift station project area is located in the Evansville USGS 7.5 topographic quadrangle in Knight Township, T6S, R10W, and the southwest ¼ of section 15 (see Figure 1).

III. PROJECT NEED AND PURPOSE

The Weinbach lift station was constructed in 1955 and receives flows from a 24-inch sanitary sewer and a 36-inch combined sewer which overflows into the lift station after flows reach a certain level. A 24-inch force main carries flow from the lift station to a 36-inch interceptor in Weinbach Avenue.

In 1992, the lift station was rehabilitated; the city replaced pumping equipment, piping, and valves and upgraded the screens.

This lift station has been very high maintenance and is in very poor condition. The mechanical bar screen was removed due to deterioration. Currently, only one out of three pumps is operational, so the city has been using rental pumps as backup. Another concern is that the 24-inch force main from the lift station discharges into a 36-inch gravity sewer that has an estimated capacity of 6,500 gpm. The current lift station pumps are slightly oversized, which causes the 36-inch sewer to surcharge and cause overflows. Therefore, the pumps selected for this renovation project will be designed to not exceed the capacity of the 36-inch sewer.

The proposed project includes: converting the lift station from a dry pit/wet well configuration to a triplex submersible lift station with three variable speed control pumps rated at 3,500 gpm each; constructing an exterior valve vault adjacent to the south wall of the lift station structure; performing electrical work in the electrical/generator building; and installing a new sewage

grinder, manually cleaned bar screen, bypass pumping system, flow meter and approximately 70 feet of 24-inch ductile iron force main. The project will also eliminate confined space safety issues.

During average flow conditions, the one pump will send flow via the 24-inch force main downstream to the 36-inch sewer. During peak flows, two pumps will send flows downstream; the third pump will serve as a backup. When the capacity of the downstream sewer has been reached, excess flows will be stored in the 96-inch interceptor upstream of the lift station. When the 96-inch interceptor reaches full capacity, the Oak Hill combined sewer overflow at Pigeon Creek (CSO 011) will be activated. The proposed project will not change the operation of this CSO.

Three alternatives were evaluated for the lift station renovation project including the “No Action” alternative:

The “**No Action**” alternative was rejected, since the lift station’s deteriorated condition and operational problems would continue.

Installing a Duplex System along the West Wall – This alternative proposes installing two pumps rated at 6,500 gpm each along the west wall of the new wet well and discharging through a new valve vault located above the pumps. The valve vault would have 16-inch discharge piping, a check valve and plug valve that would connect to a new section of 24-inch force main connecting to the existing 24-inch force main. Based on cost, this alternative was rejected.

Installing a Triplex System along the South Wall - This alternative proposes installing three pumps rated at 3,500 gpm each along the south wall of the new wet well and discharging through the wall using 16-inch discharge piping. An exterior valve vault will be constructed adjacent to the south wall containing 16-inch check and plug valves that will connect a new section of 24-inch force main that ultimately will connect to an existing 24-inch force main. **Based on cost, this was the selected alternative.** See Figure 2.

IV. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Cost Summary

<u>Construction Components</u>	<u>Costs</u>
Mobilization/Demobilization/Bonds/Insurance	\$ 60,000
General Conditions	32,000
Mechanical	821,650
Bypass Pumping System	203,860
Demolition	153,570
Structural	414,200
Electrical Work	123,930
Heating, Ventilating and Air Conditioning	26,100

Sitework	<u>137,200</u>
Subtotal Estimated Construction Costs	\$1,972,510
Contingencies	<u>197,251</u>
Total Estimated Construction Costs	\$ 2,169,761
 Non- Construction Costs	
Engineering and Design	\$198,700
Inspection/Construction Services	103,985
Legal & Financial	<u>30,000</u>
Total Non-Construction Costs	\$332,685
 Total Estimated Project Costs	 \$ 2,502,446

- B. The city will borrow approximately \$2,502,446 through a State Revolving Fund (SRF) Loan Program loan at an interest rate to be determined at loan closing.

V. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

The project will affect only areas previously disturbed by construction activity. The project will not affect endangered species or their habitat, National Natural Landmarks, streams, wetlands (see Figure 2) or the 100-year floodplain (see Figure 3); the project will not need borrow soil.

Construction and operation of the project will not alter, demolish or remove historic properties (see Figure 4). If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such properties for inclusion in or eligibility for the National Register of Historic Places. The SRF's finding pursuant to Section 106 of the Historic Preservation Act is: "no historic properties affected"

VI. PUBLIC PARTICIPATION

A properly noticed public hearing was held at the Evansville Water & Sewer Utility Conference Room 104 in the Civic Center on January 3, 2012, at 4:00 p.m. to discuss the Preliminary Engineering Report. No one from the public attended the hearing, and no written comments were received.

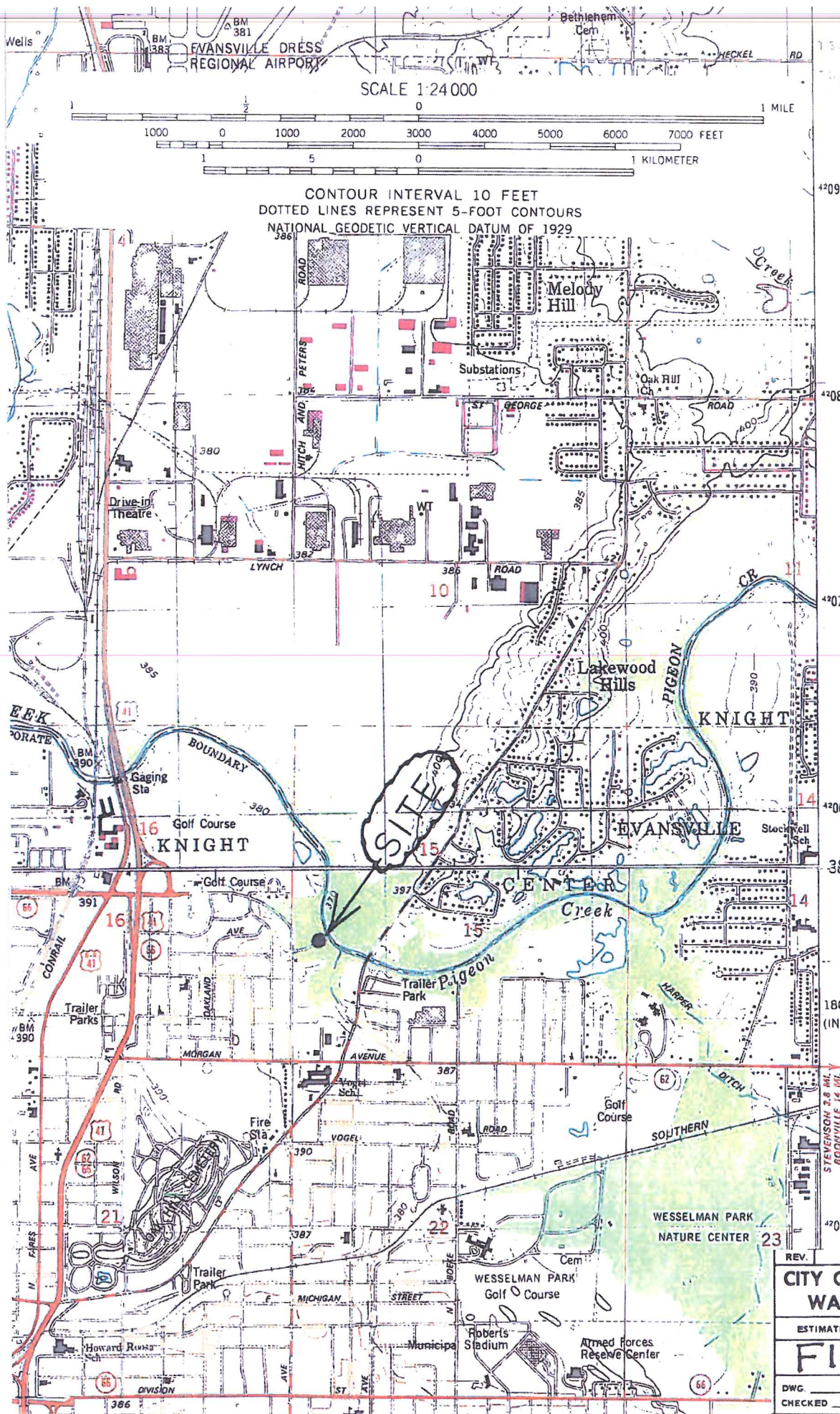




FIGURE 2: Proposed Project Area and Wetlands

SITE
NEW CONSTRUCTION

WETLANDS

REVISED 2-13-2012

**CITY OF EVANSVILLE, IN
Water & Sewer Utility**

**Weinbach Lift Station
WETLAND MAP**
scale
1"=100'



NFIP

FIRM

FLOOD INSURANCE RATE MAP

VANDERBURGH COUNTY, INDIANA

AND INCORPORATED AREAS

PANEL 182 OF 275

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
EVANSVILLE CITY OF	18057	0182	D
VANDERBURGH COUNTY	18058	0182	D

PANEL 0182D

MAP NUMBER

18163C0182D

EFFECTIVE DATE

MARCH 17, 2011

Federal Emergency Management Agency

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

U.S. DEPARTMENT OF AGRICULTURE

●-SITE

This is an official copy of a portion of the above referenced flood map. It was extracted using F-4MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

FIGURE 3: 100-Year Floodplain

Evansville Scattered Sites (51430-452)

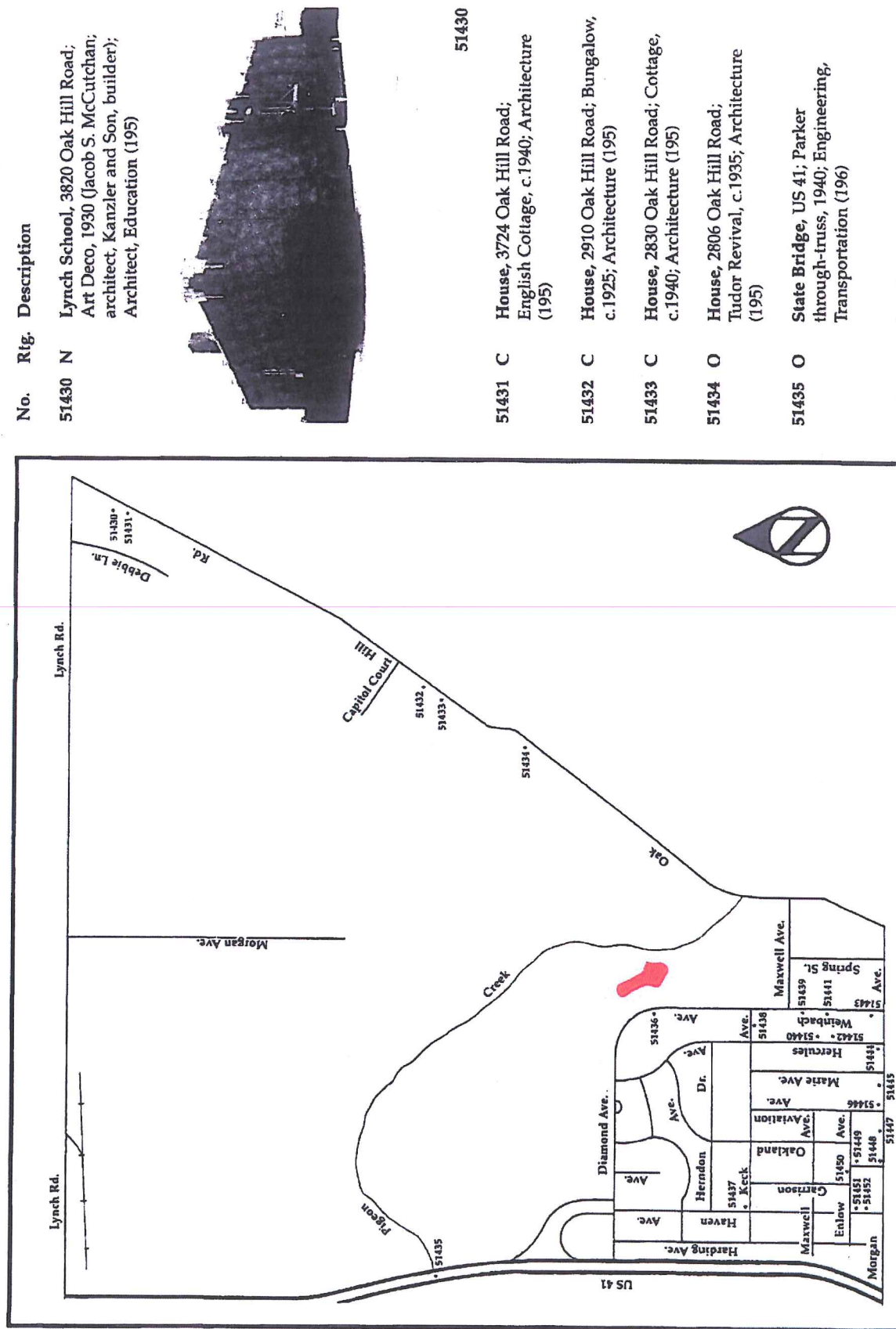


FIGURE 4: Historic Sites from Vanderburgh Co. Interim Report
Indiana Historic Sites and Structures Inventory